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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,679	12/21/2001	Edward M. Dexheimer	12099	4997
28484	7590	03/09/2004	EXAMINER	
BASF CORPORATION LEGAL DEPARTMENT 1609 BIDDLE AVENUE WYANDOTTE, MI 48192			KEYS, ROSALYND ANN	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,679

Applicant(s)

DEXHEIMER, EDWARD M.

Examiner

Rosalynd Keys

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,12-20,22,23,25-28,30-33,35-37 and 41-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,12-20,22,23,25-28,30-33,35-37 and 41-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-10, 12-20, 22, 23, 25-28, 30-33, 35-37, 41-45 are pending.

Claims 1-10, 12-20, 22, 23, 25-28, 30-33, 35-37, 41-45 are rejected.

Claims 11, 21, 24, 29, 34, 38-40, and 46-60 are cancelled.

Information Disclosure Statement

2. The information disclosure statement filed January 23, 2004 has been considered. The claims of U.S. Serial No. 10/037,958 and U.S. Serial No. 10/036,928 have also been considered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-10, 12-20, 22, 23, 25-28, 30-33, 35-37, and 41-45 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Edwards (US 4,721,817) alone or in view of Reichel et al. (US 6,103,850), for the reasons given in the previous office action.

Reichel et al. teach that the structure of polyether polyols can vary widely depending upon the desired application (see column 2, line 60 to column 3, line 45). In particular, it is disclosed to be known to prepare heteric polyether polyols (see column 3, lines 17-37) and terminal capped polyols (see column 3, lines 38-45).

One having ordinary skill in the art at the time the invention was made would have found it obvious to vary the structure of the polyether polyols of Edwards, as taught by Reichel et al., depending upon the desired application of the polyether polyol.

5. Claims 1-10, 12-20, 22, 23, 25-28, 30-33, 35-37, 41 and 42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Le-Khac (EP 0 761 708 A2) alone or in view of Reichel et al. (US 6,103,850).

The instant invention is directed to a polyether polyol having an

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unsaturation of less than or equal to 0.015 meq/g KOH and a number average molecular weight of 2,000 to 10,000 with no higher molecular weight polyols, which is made by a particular process, i.e., a product-by-process.

Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Le-Khac disclose polyether polyols having average hydroxyl functionalities from about 2 to 8, more preferably from about 2 to 6, and most preferably from about 2 to 3. The polyols have number average molecular weights within the range of about 500 to about 50,000. A more preferred range is from about 1,000 to about 12,000; most preferred is the range from about 2,000 to about 8,000 (see page 5, lines 5-8). Like the polyether polyols of the instant invention the polyether polyols disclosed by Le-Khac have very low unsaturations and they do not require removal of the catalyst from the finished polyether polyol product (see page 2, lines 33-36 and Table 1). The polyether polyols produced may be random or block (see page 4, lines 48-51), which the skilled artisan would reasonably believe to include heteric and terminal capped polyols (see column

3, lines 17-43 of Reichel et al.) Further, Reichel teach that the structure of polyether polyols can vary widely depending upon the desired application of the polyether polyol (see column 2, line 60 to column 3, line 45). The structure of the polyether polyols included in the invention varies (see page 4, line 51 to page 5, line 4). However, if Le-Khac did not teach heteric or terminal capped polyether polyols one having skill in the art would have found it obvious to modify the structure of the polyether polyols of Le-Khac depending on the desired application of the polyether polyol.

Response to Amendment

6. The rejection of claims 1-3, 6-10, 12-20, 22, 25-28, 30, 32, 33, 35, 41 and 42 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pazos et al. (US 5,919,988) is withdrawn due to the limitation "no higher molecular weight polyols" which is part of the amendment filed December 18, 2003.

7. The rejection of claims 1-10, 12-20, 22, 23, 25-28, 30-33, 35-37, 41 and 42 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Reichel et al. (US 6,103,850) is withdrawn due to the amendments filed December 18, 2003 requiring only C₂ or C₃ alkylene oxides to be utilized.

Response to Arguments

Rejection of claims 1-10, 12-20, 22, 23, 25-28, 30-33, 35-37, and 41-45 under 35

U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Edwards (US 4,721,817) alone or in view of Reichel et al. (US 6,103,850)

8. Applicant's arguments filed December 18, 2003 have been fully considered but they are not persuasive because Edwards produces polyether polyols (see for example column 1, lines 5 and 6). As reactant a) Edwards prefers to utilize ethylene oxide, propylene oxide or mixtures thereof, with particular preference given to ethylene oxide (see column 4, lines 66 to column 5, line 2). As reactant b) Edwards teaches primary, secondary, tertiary and polyhydric alkanols (see column 5, lines 3-27). Finally contrary to the Applicants statement that the catalyst in Edwards is somewhat different from the aluminum phosphonate catalyst of the instant invention the Examiner finds the catalyst to be similar. Edwards uses the same aluminum and phosphonic acid compounds utilized by the Applicants to make their aluminum phosphonate catalyst (see pages 7 and 9 of the instant specification and column 6, line 28 to column 9, line 46). Thus, even though Edwards do not expressly disclose the unsaturation and number average molecular weight of their polyether polyols, one having ordinary skill in the art would reasonably conclude that they would be the same as those of the instant invention since the polyether polyols of the instant invention were produced with the same reactants, the same catalysts, as well as the same reaction conditions as those of the instant invention. Thus, the claimed unsaturation and number average molecular weight of their polyether polyols are inherently taught.

For the above reasons, this rejection is maintained.

Conclusion

9. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on January 23, 2004 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M and F 3:00-8:00 pm and T-R 5:30-10:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. Keys

R. Keys
March 5, 2004

Rosalyn Keys

Rosalyn Keys
Primary Examiner
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